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Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C  (Rev. 10/03)

| | | Application No. | Applicant(s) |
| | | 10/643,029 | SMITH, CHRISTOPHER D. |
| **Office Action Summary** | | Examiner | Art Unit | |
| | | Patrick A. Darno | 2163 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on <u>27 November 2006</u>.

2a)☐ This action is **FINAL**.     2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) <u>1-54</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-54</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>18 August 2003</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All  b)☐ Some *  c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

## DETAILED ACTION

1.      Claim 54 is new. Claims 1 and 20 have been amended. Claims 1-54 are pending in this

office action.

### *Claim Rejections - 35 USC § 112*

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making
> and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it
> pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode
> contemplated by the inventor of carrying out his invention.

2.      Claims 20-53 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with

the written description requirement. The claim(s) contains subject matter which was not

described in the specification in such a way as to reasonably convey to one skilled in the relevant

art that the inventor(s), at the time the application was filed, had possession of the claimed

invention.

With respect to claim 20, the newly amended claim recites the limitation, 'the

information in the provisioning entity section causing the provisioning entity to occur.' The

Examiner first points out that the Applicant failed to point out support for all amendments made

to the claims. Furthermore, the Examiner was unable to find support for this newly added claim

limitation. Therefore, it is concluded that the Applicant failed to provide proper written

description for newly added subject matter recited above with respect to claim 20. It appears that

the Applicant has introduced new matter into the claimed invention. Since new matter was

introduced into the claimed invention, the claim is rejected under 35 U.S.C. 112, first paragraph,

because the specification fails to provide an adequate written description of the claimed subject

matter. As a result, the claims contain subject matter, which was not described in the

specification in such a way as to reasonably convey to one skilled in the relevant art that the

inventor(s), at the time the application was filed, had possession of the claimed invention.

In order to overcome this rejection, the Applicant can either point out in the Applicant's

specification where support for this amendment exists or amend the claims in order to delete the

claim limitation. Regardless of the choice the Applicant decides to make, appropriate correction

is required.

### *Claim Rejections - 35 USC § 101*

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or
> any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and
> requirements of this title.

3.      Claims 1 and 20 are rejected under 35 U.S.C. 101 because the claims are directed to non-

statutory subject matter.

Claims 1, 20, and 54 are rejected because the claims are directed to a data structure that

does not satisfy the IEEE definition for a data structure. The IEEE definition for a data structure

is "a physical or logical relationship among data elements, designed to support specific data

manipulation functions." There is clearly no relationship among data elements specific to a data

manipulation function in applicant's claimed "data structure." In order to overcome this

rejection, the applicant must show a functional relationship between the data elements in the

claimed "data structure" resulting in data manipulation. Furthermore, the final outcome or result

of the data manipulation must produce a useful, concrete, and tangible. Appropriate correction is

required.

Claims 2-19 are rejected because they fail to resolve the deficiencies of claim 1.

Claims 21-53 are rejected because they fail to resolve the deficiencies of claim 20.

Claim 54 is rejected because it contains the same deficiencies of claim 1.


*Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
such that the subject matter as a whole would have been obvious at the time the invention was made to a person
having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
manner in which the invention was made.

4.       Claims 1-14, 16-34 and 36-54 are rejected under 35 U.S.C. 103(a) as being unpatentable

over U.S. Patent Application Publication Number 2003/0065738 issued to Victor Shiang Yang et

al. (hereinafter "Yang") in further view of U.S. Patent Application Publication Number

2004/0087300 issued to John Ervin Lewis (hereinafter "Lewis").

**Claim 1:**

Yang discloses a system for triggering a provisioning event in a service provider using a

provisioning request message generated by an external system, comprising:

a provisioning system *(Yang: Fig. 1a or Fig. 1b)* operable to receive the provisioning request

message *(Yang: paragraph [0051], lines 1-8; The trigger message is the provisioning request message. Later in the*

*reference the trigger message is called an SMS (short messaging service) message. The data structure for this*

*message can be seen in Fig. 4a.)* from the external system *(Yang: paragraph [0047], lines 1-8; Note the user*

*may issue the provisioning request message or the call center (service provider) may issue the provisioning request*

*message or some other entity (external system) may issue the provisioning request message.)* and transmit

information in the provisioning request message to the service provider to trigger the

provisioning event *(Yang: paragraph [0051], lines 1-8)*;

the provisioning request message having:

a header section *(Yang: paragraph [0058], lines 1-2 and Fig. 4a, 40)*;

a body section *(Yang: paragraph [0059], lines 17-19 and Fig. 4a, 46)*;

the provisioning system in communication with the external system and the service

provider *(Yang: paragraph [0047], lines 1-8; The reference is clear that there are three possible ways a*

*provisioning request can be initiated. By the user, by the call center (service provider), or <u>some other entity</u>. This*

*clearly means that a third party external to the user or call center can initiate a provisioning request. Since an*

*outside, external entity can initiate a provisioning request message, the provisioning system must be in*

*communication with the external system and service provider.)*, wherein the service provider is operable to

communicate with the entity to cause the provisioning event to occur in response to receiving the

provisioning request message from the provisioning system *(Yang: paragraph [0051], lines 1-8 and*

*paragraph [0066])*;

the service provider operable to provide mobile communication service to the entity

*(Yang: paragraph [0021]; The system allows for the user to 'obtain information and <u>services over a wireless</u>*

*<u>communications network</u>'. Surely this involves the service provider providing the entity with some form of*

*mobile communication service.).*

Yang does not explicitly disclose a provisioning entity section contained within the body

section that includes information identifying an entity to which the provisioning event pertains,

wherein the provisioning entity section includes one or more attributes defined by the external

system.

However, Lewis discloses a provisioning entity section contained within the body section

that includes information identifying an entity to which the provisioning event pertains *(Lewis:*

*paragraph [0121], lines 5-9 and paragraph [0127], lines 1-5; The first reference shows that the routing information contains a destination device type. The second reference shows the routing information is part of the overall provisioning message to be sent. It is clear that the message sent is a provisioning request because it is used to verify the status of a subscription from a subscriber (service provider). This is one example from the applicant's specification of a provisioning event in paragraph [0009]. Note particularly where applicant states provisioning events include "status information associated with a service." Since the message sent in the Lewis reference is a request to perform a provisioning event, the request must be a provisioning request (see paragraph [0012], lines 3-6 of applicant's specification). And the provisioning request message used by Lewis further includes "information identifying an entity to which the provisioning event pertains". This information in the Lewis reference is the 'Destination Device Type'. This routing information that is part of the provisioning request message makes is the provisioning entity section.),* wherein the provisioning entity section includes one or more attributes defined by the external system *(Lewis: paragraph [0174], lines 3-8; This is a listing of further attributes describing the destination device and stored at an external system. These can be queried and included in the provisioning request message as part of a provisioning entity section.).*

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Yang with the teachings of Lewis noted above for the purpose of including a destination device type ("information identifying an entity") inside a provisioning request *(Lewis: paragraph [0121], lines 5-9 and paragraph [0127], lines 1-5; First note that the routing information contains a device type. Then note that the routing information is part of the overall provisioning message to be sent.).* The skilled artisan would have been motivated to improve the invention of Yang per the above such that the destination device type would aid in the delivery process of the provisioning request *(Lewis: paragraph [0150], lines 5-8; The ARC receive the provisioning request from the subscriber (provisioning system) and then direct the provisioning request to the appropriate device*

*type. So one of ordinary skill in the art can clearly see that the device type can play an important role in the delivery*

*of a provisioning request.).*

## Claim 2:

The combination of Yang and Lewis discloses all the elements of claim 1, as noted

above, and Lewis further discloses wherein the one or more attributes of the provisioning entity

section include a name attribute that identifies the entity *(Lewis: paragraph [0121], lines 5-9; The*

*destination device type is the name attribute that identifies the entity. See rejection of claim 1 for further*

*explanation of this reference.).*

## Claim 3:

The combination of Yang and Lewis discloses all the elements of claim 1, as noted

above, and Lewis further discloses wherein the one or more attributes of the provisioning entity

section include a type attribute that identifies an entity type of the entity *(Lewis: paragraph [0121],*

*lines 5-9).*

## Claim 4:

The combination of Yang and Lewis discloses all the elements of claim 3, as noted

above. Yang does not explicitly disclose wherein the type attribute identifies a model number of

the entity. However, Lewis further discloses wherein the type attribute identifies a model

number of the entity *(Lewis: paragraph [0361], lines 1-4; The mobile identification number is the model*

*number.).*

It would have been obvious to one of ordinary skill in the art at the time the invention

was made to further modify the previously mentioned combination with the further teachings of

Lewis noted above. The skilled artisan would have been motivated to further improve the

previously mentioned combination per the above such that user and device information stored in

a database can be used for routing messages, validation of services, and for enabling other data

services *(Lewis: paragraph [0319]; This shows that the information stored in the MIND database can also be used*

*in the provisioning requests disclosed by Lewis. Note that it specifically states that data stored in the MIND*

*database (subscriber information) can be used for "routing messages" (or provisioning requests). And as cited in*

*the rejection of claim 1, the routing information is part of the provisioning request.).*

## Claim 5:

The combination of Yang and Lewis discloses all the elements of claim 1, as noted

above, and Yang further discloses wherein the service provider is a mobile data service provider

*(Yang: paragraph [0041], lines 2-5 and 12-15).*

## Claim 6:

The combination of Yang and Lewis discloses all the elements of claim 1, as noted

above, and Lewis further discloses wherein the provisioning request message further includes a

provisioning data item section contained within the provisioning entity section that identifies a

particular entity to which the provisioning event pertains *(Lewis: paragraph [0121], lines 5-9 and*

*paragraph [0127], lines 1-5; See rejection of claim 1 for a detailed explanation of this reference.).*

## Claim 7:

The combination of Yang and Lewis discloses all the elements of claim 6, as noted

above, and Yang further discloses wherein the particular entity is a mobile communication

device *(Yang: paragraph [0006], lines 1-3 and paragraph [0042], lines 4-8).*

## Claim 8:

The combination of Yang and Lewis discloses all the elements of claim 6, as noted

above, and Lewis further discloses wherein the provisioning data item section includes one or

more attributes defined by the external system *(Lewis: paragraph [0319] and paragraphs [0035] and*

*[0038]; The first reference shows that the information stored in the MIND database can also be used in the*

*provisioning requests disclosed by Lewis. Note that it specifically states that data stored in the MIND database*

*(subscriber information) can be used for "routing messages" (or provisioning requests). And as cited in the*

*rejection of claim 1, the routing information is part of the provisioning request. The second reference gives*

*attributes defined by the external system and stored in the MIND database. These attributes from the MIND*

*database can be included in the routing message and when the routing information is combined with the*

*provisioning request message, as described above, the section of the message containing the attributes of the*

*destination device is the provisioning data section.).*

## Claim 9:

The combination of Yang and Lewis discloses all the elements of claim 8, as noted

above, and Lewis further discloses wherein the one or more attributes of the provisioning data

item section include a name attribute that identifies a type of information included within the

provisioning data item section *(Lewis: paragraph [0385] and [0388]; Note that all the name attributes listed*

*by the applicant in paragraph [0024] are also listed in the cited paragraphs from Lewis. And again, the attributes*

*listed in the cited paragraphs from Lewis can be included in the routing information (Lewis: paragraph [0319]), and*

*the routing information is then added to the provisioning request message. Further note that the reason Lewis*

*incorporates these attributes so that a message can specify requests to provision entities (destination devices) on a*

*plurality of diverse systems using different schemas (Applicant's specification paragraph [0024] and Lewis:*

*paragraph [0093], lines 5-10).).*

**Claim 10:**

The combination of Yang and Lewis discloses all the elements of claim 9, as noted

above, and Lewis further discloses wherein the type of information included within the

provisioning data item section includes a personal identification number (PIN) for the entity

*(Lewis: paragraph [0388], lines 15-17).*

**Claim 11:**

The combination of Yang and Lewis discloses all the elements of claim 9, as noted

above, and Lewis further discloses wherein the type of information included within the

provisioning data item section includes a product identifier for the entity *(Lewis: paragraph [0361]*

*and paragraph [0319], lines 7-8; The device identifier is the product identifier.).*

**Claim 12:**

The combination of Yang and Lewis discloses all the elements of claim 9, as noted

above, and Lewis further discloses wherein the type of information included within the

provisioning data item section includes a billing identifier for the entity *(Lewis: paragraph [0350], line*

*10 and paragraph [0319]).*

**Claim 13:**

The combination of Yang and Lewis discloses all the elements of claim 9, as noted

above, and Lewis further discloses wherein the type of information included within the

provisioning data item section includes an international mobile subscriber identity identifier

(IMSI) for the entity *(Lewis: paragraph [0388], lines 1-6 and paragraph [0319]).*

## Claim 14:

The combination of Yang and Lewis discloses all the elements of claim 9, as noted

above, and Lewis further discloses wherein the type of information included within the

provisioning data item section includes a mobile subscriber integrated services digital network

number (MSISDN) for the entity *(Lewis: paragraph [0388], lines 1-6 and paragraph [0319])*.

## Claim 16:

The combination of Yang and Lewis discloses all the elements of claim 1, as noted

above, and Lewis further discloses wherein the provisioning entity section contains one or more

additional provisioning entity sections that include information identifying one or more

additional entities to which the provisioning event pertains, and wherein the one or more

additional provisioning entity sections each include one or more attributes defined by the

external system *(Lewis: paragraphs [0172] and [0173]; These references disclose sending provisioning requests to*

*multiple or additional users. The multiple users are taken from a distribution list and all the users receive the same*

*messages. Further additional users can be added to any list. Further for each additional user device type,*

*destination address, and all other attributes are included in the message (this is equivalent to the provisioning entity*

*and provisioning data item sections).)*.

It would have been obvious for one of ordinary skill in the art at the time the invention

was made to modify the previously mentioned combination with the further teachings of Lewis

noted above. The skilled artisan would have been motivated to further improve the previously

mentioned combination per the above such that a single message would contain routing

information for multiple devices *(Lewis: paragraph [0121], lines 1-5)*.

## Claim 17:

The combination of Yang and Lewis discloses all the elements of claim 16, as noted

above, and Lewis further discloses wherein a data structure relationship between the

provisioning entity section and the one or more additional provisioning entity sections is defined

by the external system *(Lewis: paragraphs [0172]-[0173]; The distribution list on the external system creates*

*the data structure relationship between the additional entities.)*.

## Claim 18:

The combination of Yang and Lewis discloses all the elements of claim 16, as noted

above, and Lewis further discloses wherein the one or more additional provisioning entity

sections each contain a provisioning data item section *(Lewis: paragraphs [0172]-[0174] and paragraph*

*[0168] and paragraph; These references show that each provisioning request includes a destination device type and*

*destination device address. This makes up the provisioning entity and provisioning data item sections respectively.*

*And each distribution list causes a provisioning request message containing each of the previously mentioned*

*sections to everyone on the list. Therefore each additional provisioning entity contains a provisioning data item.)*.

## Claim 19:

The combination of Yang and Lewis discloses all the elements of claim 18, as noted

above, and Lewis further discloses wherein the provisioning data item sections contained within

the additional provisioning entity sections each include one or more attributes defined by the

external system *(Lewis: paragraph [0319] and paragraphs [0035] and [0038]; The first reference shows that the*

*information stored in the MIND database can also be used in the provisioning requests disclosed by Lewis. Note*

*that it specifically states that data stored in the MIND database (subscriber information) can be used for "routing*

*messages" (or provisioning requests). And as cited in the rejection of claim 1, the routing information is part of the*

*provisioning request. The second reference gives attributes defined by the external system and stored in the MIND*

*database. These attributes from the MIND database can be included in the routing message and when the routing*

*information is combined with the provisioning request message, as described above, the section of the message*

*containing the attributes of the destination device is the provisioning data section.).*

## Claim 20:

Yang discloses a computer readable medium for storing data for access by an application

program being executed on a data processing system comprising: a provisioning data structure

stored in the computer readable medium *(Yang: paragraph [0100], lines 2-7 and Fig. 10, 1100; This*

*reference and figure clearly show retrieving 'messages' (provisioning data structure) from storage so there.must*

*clearly be 'messages' stored in a computer readable medium.)*, the provisioning data structure including

information resident in a database used by the application program including:

the header section *(Yang: paragraph [0058], lines 1-2 and Fig. 4a, 40)*;

the body section *(Yang: paragraph [0059], lines 17-19 and Fig. 4a, 46)*;

wherein the provisioning data structure stored in the computer readable medium *(Yang:*

*paragraph [0100], lines 2-7 and Fig. 10, 1100; This reference and figure clearly show retrieving 'messages'*

*(provisioning data structure) from storage so there must clearly be 'messages' stored in a computer readable*

*medium.)* is for use in a system for triggering a provisioning event in a service provider *(Yang:*

*paragraph [0051], lines 1-8)*, the system including an external system that generates a provisioning

request message *(Yang: paragraph [0047], lines 1-8; Note the user may issue the provisioning request message*

*or the call center (service provider) may issue the provisioning request message or some other entity (external*

*system) may issue the provisioning request message.)* and a provisioning system that receives the

provisioning request message to the service provider to trigger the provisioning event *(Yang: Fig.*

*1a or Fig. 1b and paragraph [0051], lines 1-8; The trigger message is the provisioning request message. Later in the*

*reference the trigger message is called an SMS (short messaging service) message. The data structure for this*

*message can be seen in Fig. 4a.)*;

the provisioning system in communication with the external system and the service

provider *(Yang: paragraph [0047], lines 1-8; The reference is clear that there are three possible ways a*

*provisioning request can be initiated. By the user, by the call center (service provider), or <u>some other entity</u>. This*

*clearly means that a third party external to the user or call center can initiate a provisioning request. Since an*

*outside, external entity can initiate a provisioning request message, the provisioning system must be in*

*communication with the external system and service provider.)*, the service provider being operable to

communicate with the entity to cause the provisioning event to occur in response to receiving the

provisioning request message from the provisioning system *(Yang: paragraph [0051], lines 1-8 and*

*paragraph [0066])*;

the service provider operable to provide mobile communication service to the entity

*(Yang: paragraph [0021]; The system allows for the user to 'obtain information and <u>services over a wireless</u>*

*<u>communications network</u>'. Surely this involves the service provider providing the entity with some form of*

*mobile communication service.)*.

Yang does not explicitly disclose the provisioning entity section contained within the

body section and including information identifying an entity to which the provisioning event

pertains, wherein the provisioning entity section includes one or more attributes defined by the

external system.

However, Lewis discloses a provisioning entity section contained within the body section

that includes information identifying an entity to which the provisioning event pertains *(Lewis:*

*paragraph [0121], lines 5-9 and paragraph [0127], lines 1-5; The first reference shows that the routing information*

*contains a destination device type.  The second reference shows the routing information is part of the overall*

*provisioning message to be sent.  It is clear that the message sent is a provisioning request because it is used to*

*verify the status of a subscription from a subscriber (service provider).  This is one example from the applicant's*

*specification of a provisioning event in paragraph [0009].  Note particularly where applicant states provisioning*

*events include "status information associated with a service."  Since the message sent in the Lewis reference is a*

*request to perform a provisioning event, the request must be a provisioning request (see paragraph [0012], lines 3-6*

*of applicant's specification).  And the provisioning request message used by Lewis further includes "information*

*identifying an entity to which the provisioning event pertains".  This information in the Lewis reference is the*

*'Destination Device Type'.  This routing information that is part of the provisioning request message is the*

*provisioning entity section.),* wherein the provisioning entity section includes one or more attributes

defined by the external system *(Lewis: paragraph [0174], lines 3-8;  This is a listing of further attributes*

*describing the destination device and stored at an external system.  These can be queried and included in the*

*provisioning request message as part of a provisioning entity section.),*

the information in the provisioning entity section causing the provisioning event to occur

*(Lewis: paragraph [0319]; The subscriber information provided with the routing information allows for the*

*validation of services.  The validation of a service must occur in order for the provisioning event to occur.).*

It would have been obvious to one of ordinary skill in the art at the time the invention

was made to modify the teachings of Yang with the teachings of Lewis noted above for the

purpose of including a destination device type ("information identifying an entity") inside a

provisioning request *(Lewis: paragraph [0121], lines 5-9 and paragraph [0127], lines 1-5; First note that the*

*routing information contains a device type.  Then note that the routing information is part of the overall*

*provisioning message to be sent.).*  The skilled artisan would have been motivated to improve the

invention of Yang per the above such that the destination device type would aid in the delivery

process of the provisioning request *(Lewis: paragraph [0150], lines 5-8; The ARC receive the provisioning*

*request from the subscriber (provisioning system) and then direct the provisioning request to the appropriate device*

*type. So one of ordinary skill in the art can clearly see that the device type can play an important role in the delivery*

*of a provisioning request.).*

### Claim 21:

The combination of Yang and Lewis discloses all the elements of claim 20, as noted

above, and Yang further discloses wherein the provisioning request message includes the

provisioning data structure *(Yang: paragraph [0057], lines 1-4 and Fig. 4a.).*

### Claim 22:

Claim 22 is rejected under the same reasons set forth in the rejection of claim 2.

### Claim 23:

Claim 23 is rejected under the same reasons set forth in the rejection of claim 3.

### Claim 24:

Claim 24 is rejected under the same reasons set forth in the rejection of claim 4.

### Claim 25:

Claim 25 is rejected under the same reasons set forth in the rejection of claim 5.

### Claim 26:

Claim 26 is rejected under the same reasons set forth in the rejection of claim 6.

### Claim 27:

Claim 27 is rejected under the same reasons set forth in the rejection of claim 7.

**Claim 28:**

Claim 28 is rejected under the same reasons set forth in the rejection of claim 8.

**Claim 29:**

Claim 29 is rejected under the same reasons set forth in the rejection of claim 9.

**Claim 30:**

Claim 30 is rejected under the same reasons set forth in the rejection of claim 10.

**Claim 31:**

Claim 31 is rejected under the same reasons set forth in the rejection of claim 11.

**Claim 32:**

Claim 32 is rejected under the same reasons set forth in the rejection of claim 12.

**Claim 33:**

Claim 33 is rejected under the same reasons set forth in the rejection of claim 13.

**Claim 34:**

Claim 34 is rejected under the same reasons set forth in the rejection of claim 14.

**Claim 36:**

Claim 36 is rejected under the same reasons set forth in the rejection of claim 16

**Claim 37:**

Claim 37 is rejected under the same reasons set forth in the rejection of claim 17.

**Claim 38:**

Claim 38 is rejected under the same reasons set forth in the rejection of claim 18.

**Claim 39:**

· Claim 39 is rejected under the same reasons set forth in the rejection of claim 19.

**Claim 40:**

The combination of Yang and Lewis discloses all the elements of claim 20, as noted

above, and Lewis further discloses wherein the computer readable medium includes a transaction

identification attribute that identifies a transaction, wherein the transaction includes a

provisioning request message, the provisioning event and a provisioning response message

*(Lewis: paragraph [0137]).*

**Claim 41:**

The combination of Yang and Lewis discloses all the elements of claim 20, as noted

above, and Lewis further discloses wherein the computer readable medium includes a transaction

type attribute that defines a transaction type of the provisioning event *(Lewis: paragraph [0137]).*

**Claim 42:**

The combination of Yang and Lewis disclose all the elements of claim 20, as noted

above, and Lewis further discloses wherein the computer readable medium includes a product

type attribute that identifies the service provider *(Lewis: paragraph [0138]; The service provider address is*

*the originating device address.  This address identifies the originator or service provider.).*

**Claim 43:**

The combination of Yang and Lewis discloses all the elements of claim 20, as noted

above, and Yang further discloses wherein the header section includes information relating to a

sender of the provisioning data structure *(Yang: Fig. 4a, 20 and paragraph [0059], lines 1-2).*

**Claim 44:**

The combination of Yang and Lewis discloses all the elements of claim 43, as noted

above, and Yang further discloses wherein the header section includes a sender section that

includes the information relating to the sender of the provisioning data structure *(Yang: Fig. 4a, 20*

*and paragraph [0059], lines 1-2).*

## Claim 45:

The combination of Yang and Lewis discloses all the elements of claim 44, as noted

above, wherein the sender section includes an identification attribute that includes an identifier

for the sender of the provisioning data structure and a name attribute that includes a name for the

sender of the provisioning data structure *(Yang: Fig. 4a, 20 and paragraph [0059], lines 1-2; Note that this*

*section of the data structure contains either the sender's (originator's) address or a sender's number. The sender's*

*number is equivalent to a name because it is used to identify the sender. That is exactly the same purpose as a*

*sender name.).*

## Claim 46:

The combination of Yang and Lewis discloses all the elements of claim 43, as noted

above, and Yang further includes wherein the header section includes a time stamp section that

identifies a time at which the provisioning data structure is generated *(Yang: Fig. 4a, 41 and*

*paragraph [0058], lines 12-14).*

## Claim 47:

The combination of Yang and Lewis discloses all the elements of claim 20, as noted

above, and Lewis further discloses wherein the provisioning data structure is created using an

extensible markup language *(Lewis: paragraphs [0111], lines 3-8 and paragraph [0127], lines 1-5).*

It would have been obvious for one of ordinary skill in the art at the time the invention

was made to modify the previously mentioned combination with the further teachings of Lewis

noted above. The skilled artisan would have been motivated to further improve the previously

mentioned combination such that a common format such as XML could be used to facilitate the

sending and receipt of messages using different messaging protocols and formats, across a range

of messaging centers and gateways *(Lewis: paragraph [0093], lines 7-10 and paragraphs [0111], lines 3-8*

*and paragraph [0127], lines 1-5)*.

## Claim 48:

The combination of Yang and Lewis discloses all the elements of claim 20, as noted

above, and Lewis further discloses wherein the provisioning system transmits a provisioning

reply message to the external system in response to the provisioning request message, and

wherein the provisioning reply message includes the provisioning data structure *(Lewis: see at least*

*paragraphs [0141], [0142], [0143], and [0144]; See specifically the routing reply. The cited paragraphs here show*

*determining, based on a routing reply if the subscriber has sufficient funds in a prepaid account. See further*

*paragraphs after [0144] for further examples of messages contained in the routing reply.)*.

It would have been obvious to one ordinary skill in the art at the time the invention was

made to modify the previously mentioned combination with the further teachings of Lewis noted

above. The skilled artisan would have been motivated to improve the previously mentioned

combination per the above such that the status of a subscriber's account could be verified *(Lewis:*

*paragraph [0144])*.

## Claim 49:

The combination of Yang and Lewis discloses all the elements of claim 48, as noted

above, and Lewis further discloses wherein the header section includes a login section and a

password section for authenticating the provisioning system *(Lewis: paragraph [0121], lines 9-11)*.

**Claim 50:**

The combination of Yang and Lewis discloses all the elements of claim 48, as noted

above, and Lewis further discloses wherein the header section includes a transaction code list

section that includes error information relating to the provisioning request *(Lewis: paragraphs [0141]-*

*[0146] describe various kinds of errors (invalid messages) that are returned as part of the provisioning reply to the*

*provisioning request message.).*

**Claim 51:**

The combination of Yang and Lewis discloses all the elements of claim 48, as noted

above, and Lewis further discloses wherein the header section includes a transaction code list

section includes status information relating to the provisioning request *(Lewis: : paragraphs [0141]-*

*[0146]; Specifically paragraph [0144] describes the provisioning reply to the provisioning request message as*

*containing the status of the subscriber's account (i.e., whether or not there enough prepaid funds for the request).).*

**Claim 52:**

The combination of Yang and Lewis discloses all the elements of claim 50, as noted

above, and Lewis further discloses wherein the transaction code list section includes a major

code attribute that identifies a most severe error from the error information *(Lewis: paragraphs*

*[0141]-[0146]; The provisioning reply as disclosed by Lewis allows for the sending of error (invalid) messages as a*

*result of problems in the provisioning process. Designating one error as more severe than another error is simply a*

*design choice.).*

**Claim 53:**

The combination of Yang and Lewis discloses all the elements of claim 50, as noted

above, and Lewis further discloses wherein the transaction code list section includes a

description attribute that describes the error information *(Lewis: paragraphs [0141]-[0146]; See rejection for claims 48, 50, and 52 above for further explanation of this reference.)*.

**Claim 54:**

Claim 54 is rejected under the same reasons set forth in the rejection of claims 1 and 20.

5.      Claims 15 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yang in further view of Lewis and further in view of U.S. Patent Application Publication Number 2004/0058652 issued to Christopher M. McGregor et al. (hereinafter "McGregor").

**Claim 15:**

The combination of Yang and Lewis discloses all the elements of claim 9, as noted above, but does not explicitly disclose wherein the type of information included within the provisioning data item section includes an integrated circuit card identifier (ICCID) for the entity. However, McGregor discloses wherein the provisioning data item section includes an integrated circuit card identifier (ICCID) for the entity *(McGregor: paragraph [0201])*.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the previously mentioned combination with the teachings of McGregor noted above. The skilled artisan would have been motivated to improve the teachings of the previously mentioned combination per the above such that the ICCID could be used to identify a particular mobile device *(McGregor: paragraph [0201], at least lines 3-7)*.

**Claim 35:**

Claim 35 is rejected under the same reasons set forth in the rejection of claim 15.

*Response to Arguments*

<u>Applicant Argues:</u>

Initially, the claimed "data structure" in claims 1 and 20 already complies with the IEEE Standard Dictionary of Electrical and Electronics terms. The definition under the IEEE Standard Dictionary of Electrical and Electronics Terms is "a physical or logical relationship among data elements, designed to support specific data manipulation functions." The provisioning request message defined in claims 1 and 20 contain several sections which are "to trigger the provisioning event" in claim 1 and causes "the provisioning event to occur" in claim 20.

Further, claims 1 and 20 are not directed to data structures, but rather are directed to "a system for triggering a provisioning event in a service provider" and "a computer readable medium for storing data for access by an application program being executed on a data processing system" respectfully. In <u>In re Allapat</u>, the U.S. Court of Appeals for the Federal Circuit reversed an Examiner's rejection of claims directed to a rasterizer for creating a waveform because the claims were directed to a machine, which constitutes patentable subject matter under 35 U.S.C. § 101. In re Allapat, 33 F.3d 1526, 1542 (Fed. Cir. 1994). A system, and a computer readable medium are also machines or apparatuses for which patent protection may be obtained.

<u>Examiner Responds:</u>

Examiner is not persuaded. The claim will remain rejected under 35 U.S.C. 101. This is because claim 1 is still claiming a provisioning data structure that does not meet the IEEE definition of a data structure. Claim 1 clearly recites a provisioning request message having a header section, body section, and a provisioning entity section. The only thing in the Applicant's specification that fits this description is a data structure used to send provisioning requests (Applicant's Specification: at least paragraph [0003] and Abstract). However, the 'data structure' claimed by the Applicant is not a data structure as described in the IEEE dictionary. It is clear that the provisioning request message or 'data structure' being claimed by the Applicant is a mere listing of data. An alleged 'data structure' which does not satisfy the IEEE definition of a data structure recited by the Applicant above cannot be considered for patentability.

Furthermore, while the court decision of In re Allapat appears to be dealing with a

similar matter, In re Allapat alone cannot act as a blanket argument to overcome any 35 U.S.C.

101 rejection based on any technology. As it stands now a mere listing of data is "nonfunctional

descriptive material". Since the alleged 'data structure' claimed by the Applicant is simply a

mere listing of data, and therefore fails to meet the IEEE definition of a data structure, the

claims remain rejected under 35 U.S.C. 101. Consult MPEP 2106.01 for further guidance on this

topic.

Claim 20 and all of its dependent claims are also rejected under 35 U.S.C 101 for also

claiming a 'data structure' that does not satisfy the IEEE definition of a database.

Claim 54 is also rejected under 35 U.S.C 101 for also claiming a 'data structure' that does

not satisfy the IEEE definition of a database.

## Applicant Argues:

Because there is communication directly between the call center and the mobile device, either the
provisioning system or the external system is not present in Yang. The Examiner responds to this
argument by citing Yang paragraph 47, which allows for a call center *or other entity* to "determine that an
application program should be updated or replaced..." However, the "other entity" is an alternative to the
call center, and therefore, Yang does not disclose an external entity determining the service to be updated,
and a provisioning system in communication with the service provider to trigger the provisioning event.

## Examiner Responds:

Examiner is not persuaded. The Applicant is in fact correct that the "other entity" is an

alternative to the call center. But the Examiner respectfully disagrees with the Applicant's

overall interpretation of the Yang reference. Paragraph [0047] clearly focuses on who initiates a

provisioning request. The paragraph clearly progresses by first stating the "user is not

necessarily required to request the new or updated application program". This makes it clear

that the user is the first entity that has the option to issue a provisioning request. Paragraph

[0047] further states that the call center (option 2) **or other entity** (option 3) may determine that

an application program should be updated. The Examiner believes this is clear that a third

party or external system can issue provisioning requests. It is the Examiner's position that the

'other entity' is an alternative as to who or what issues the provisioning request. As noted

above, the Yang reference provides three alternatives for issuing a provisioning request: the

user, call center, or other external entity. Therefore, the rejections given under 35 U.S.C. 103(a)

are upheld.


## Applicant Argues:

Claim 1 recites "the provisioning system in communication with the external system and the service provider, wherein the service provider is operable to communicate with the entity to cause the provisioning event to occur in response to receiving the provisioning request message from the provisioning system." Claim 1, therefore, clearly claims four elements needed to complete the triggering of a provisioning event: (1) a provisioning system; (2) an external system; (3) an entity; and (4) a service provider (see p. 3, lines 3-21). According to the claim and the specification, the service provider is in communication with the provisioning system and the entity, where the entity is present within the mobile data service of the service provider. The provisioning system is in communication with the external system and the service provider, but not the entity. Neither Yang nor Lewis discloses these elements.


## Examiner Responds:

Examiner is not persuaded. First, In response to applicant's argument that the

references fail to show certain features of applicant's invention, it is noted that the features upon

which applicant relies (i.e., "the service provider is in communication with the provisioning

system and the entity, where the entity is present within the mobile data service provider. The provisioning system is in communication with the external system and the service provider, <u>but not the entity</u>.) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Second, the only attempt presented to refute the Examiner's prima facie case of obviousness has been the Applicant's own arguments and opinions (i.e., "Neither Yang nor Lewis discloses these elements."). No evidence has been presented to support the Applicant's arguments and opinions. The examiner notes the rule set forth in 37 C.F.R. 1.111(b) which requires Applicant to "distinctly and specifically point out errors" in the examiner's office action. Furthermore, it should be noted that arguments, opinions, or conclusions of Applicant and the Applicant's counsel cannot take the place of evidence (See *In re Budnick*, 537 F.2d at 538, 190 USPQ at 424; *In re Schulze*, 346 F.2d 600, 145 USPQ 716 (CCPA 1965); *In re Cole*, 326 F.2d 769, 140 USPQ 230 (CCPA 1964)).

The Examiner has presented a very detail and very thorough prima facie case in the above office action. Each element of the claims has been precisely mapped to the prior art, and all combinations have been supported by proper motivation to combine the references. In light of the above office action, and lack of persuasive arguments presented by the Applicant, the rejections give under 35 U.S.C 103(a) are upheld.
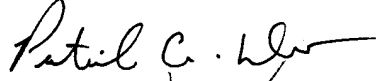
## *Contact Information*

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Patrick A. Darno whose telephone number is (571) 272-0788.

The examiner can normally be reached on Monday - Friday, 9:00 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Don Wong can be reached on (571) 272-1834. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

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